REMARKS

The above-captioned application received an Office Action dated April 22, 2003, to which a Response was inadvertently not timely filed. Therefore, Applicants are submitting herewith a Request for Continued Examination and a Petition to revive the above-identified application. This Preliminary Amendment is respectfully submitted concurrently as a reply responsive to the Office Action dated April 22, 2003 in accordance with 37 C.F.R. §1.137(b) and MPEP §711.03(c).

Support for the above-requested amendments to claim 17 is found at least at page 2, paragraphs [0006] – [0007], at page 3, paragraph [0008], and at page 5, paragraph [0016]. The above-requested amendments to claims 18 and 19 are supported at least by page 2, paragraph [0005] and page 3, paragraph [0008]. In addition, claims 18 and 19 have been amended to place the claims in proper Markush format. Claim 21 has been amended to correct an inadvertent typographical error. Claim 22 has been amended to depend from claim 21. New claim 23 is supported at least by page 3, paragraph [0009] and by page 6, paragraph [0020]. No question of new matter arises and entry of the amendments is respectfully requested.

Claims 17 –19 and 21 –23 are before the Examiner for consideration.

Examiner Interview

Applicants believe that this application can be expedited to allowance if a personal interview is conducted with the Examiner. In this regard, Applicants respectfully request that the Examiner call the undersigned attorney prior to issuing an Office Action to arrange such a personal interview.

Election of Species

In the Office Action dated September 9, 2002, the Examiner required an election of species in the above-identified application as follows:

a. polyhydroxy crosslinking agents;

b. further cure accelerator constituents;

c. hydrolyzed silane coupling agents; and

d. presence or absence of mineral oil.

The Examiner indicated that during a telephone conversation with Stephen W. Barns on August 23, 2002, a provisional election was made with traverse to prosecute the species glycerin as the polyhydroxy crosslinking agent. In the outstanding Office Action, the Examiner states that Applicants need to affirm this election.

In response to this election of species requirement, Applicants hereby affirm the election of glycerin as the polyhydroxy crosslinking agent in the event that no generic claim is finally held to be allowable. Additionally, Applicants submit that claim 17 is both (a) generic for the polyhydroxy crosslinking agents useful in the inventive composition and (b) allowable. As such, Applicants respectfully request that the Examiner examine all of the species readable on the generic claim.

Rejection under 35 U.S.C. §112, second paragraph

Claims 17 – 19 and 21 – 22 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite. In particular, the Examiner asserts that the language of claim 17 is indefinite because it is unclear what conditions are used to evaluate the loss on ignition (LOI). In addition, the Examiner rejects the language "...said phosphite based regulating agent further comprises..." in claim 18 because it is unclear whether or not a composition

including just sodium or potassium phosphite as the regulating agent would infringe the claim. Claim 19 is asserted to be indefinite because hypophosphite is not a phosphite compound. The Examiner rejects claim 22 is because it depends from a canceled claim.

In response to this rejection, Applicants have amended claim 17 to remove the feature that the binder has a LOI ranging from 1.4% to 25%. In addition, claim 18 has been amended to remove the word "further". With respect to the Examiner's rejection of claim 19, Applicants have amended claims 17 – 19 to recite that the regulating agent is a phosphorus based regulating agent. Finally, Applicants have amended claim 22 to depend from claim 21.

As amended, Applicants submit that claims 17 – 19 and 21 – 22 are sufficiently definite and respectfully request that the Examiner reconsider and withdraw this rejection.

Rejection under 35 U.S.C. §102(b)/103(a)

Claims 17 – 19 and 21 - 22 have been rejected under 35 U.S.C. §102(b) as being anticipated by, or in the alternative, under 35 U.S.C. §103(a) as being obvious over Arkens *et al.* (U.S. Patent No. 5,661,213). In particular, the Examiner asserts that Arkens *et al.* disclose binders that include a polyacid, a polyol, and a phosphorus-containing accelerator. The Examiner asserts that Arkens *et al.* teach that in one embodiment, the polyacid can be formed in the presence of a phosphorus containing cure accelerator so that the phosphorus containing accelerator and the polyacid can be incorporated in the same molecule. In addition, the Examiner asserts that Arkens *et al.* teach that phosphite compounds can be used both as cure accelerators and as chain transfer reagents. Further, the Examiner states that the curing temperature recited in claim 17 is disclosed in Example 3. Finally, the Examiner asserts that although a specific LOI is not disclosed in Arkens *et al.*, it is reasonable to assume that the LOI would be the same since the compositions are the same.

In response to this rejection, Applicants respectfully direct the Examiner's attention to the amendments to independent claim 17 recited above and respectfully submit that as amended, claim 17 defines a composition that is not taught or suggested within Arkens *et al.* In particular, Applicants submit that Arkens *et al.* do not teach or suggest a composition that includes a polyacrylic acid polymerized from an acrylic acid monomer in the presence of a phosphorus based regulating agent and crosslinked by a polyhydroxy crosslinking agent having no more than one nitrogen without the addition of a separate accelerating agent. In the present invention, the phosphorus based regulating agent acts as an accelerator in the crosslinking of the polyacrylic acid. Thus, in the inventive composition, no separate accelerator needs to be added for crosslinking to occur.

Arkens *et al.* disclose an aqueous binder composition that contains a polyacid having at least two carboxylic acid groups, a polyol having at least two hydroxyl groups, and a phosphorus containing accelerator. (*See* column 3, lines 1 – 5 and 45 – 46, column 5, lines 63 – 64, column 6, lines 29 – 33, and claim 1). Thus, it is clear that the composition of Arkens *et al.* contains three separate and distinct elements, including an added accelerator. At column 5, lines 11 – 18, Arkens *et al.* teach that the polyacid can be formed in the presence of a phosphorus containing chain transfer reagent so as to incorporate the phosphorus containing chain transfer agent and the polyacid component in the same molecule. However, there is no teaching in Arkens *et al.* to use the phosphorus containing chain transfer agent as an accelerating agent in a subsequent step, as claimed in independent claim 17. In fact, Arkens *et al.* specifically requires the addition of a separate accelerator to obtain crosslinking. Applicants submit that this is different from the present invention where there is no addition of a separate phosphorus containing accelerator to the composition. Because Arkens *et al.* do not teach or suggest a composition that includes a polyacrylic acid

polymerized from an acrylic acid monomer in the presence of a phosphorus based regulating agent and crosslinked by a polyhydroxy crosslinking agent having no more than one nitrogen without the addition of a separate accelerator, as claimed in claim 17, claim 17 cannot be anticipated by, or be obvious over, Arkens *et al.*

In addition, Applicants note that in one embodiment of Arkens *et al.*, the binder composition contains a polyacid and a highly reactive polyol without the addition of a phosphorus containing accelerator. (*See* column 7, lines 15 – 18). However, Applicants submit that this composition is also different than the presently claimed invention. Arkens *et al.* teach that in order to omit the phosphorus containing accelerator from the binder composition, the polyol must contain at least two hydroxyl groups and be highly reactive. (*See* column 7, lines 18 – 23). According to Arkens *et al.*, the highly reactive polyol is preferably a highly reactive polyol of formula I. As shown in formula I, and in each of the examples of suitable highly reactive polyols shown in formulas Ia and Ib, the highly reactive polyol contains two or more nitrogen atoms. Thus, Applicants submit that Arkens *et al.* teach away from the presently claimed invention in which the composition contains a polyacid and a polyol having no more than one nitrogen atom without the addition of a separate accelerator. Thus, independent claim 17, and all claims dependent therefrom, are non-anticipated, non-obvious, and patentable.

In view of the above, Applicants submit that the present invention is not anticipated by, or obvious over, Arkens *et al.* and respectfully request that this rejection be reconsidered and withdrawn.

CONCLUSION

In light of the above, Applicants believe that this application is now in condition for allowance and therefore request favorable consideration.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

If necessary, the Commissioner is hereby authorized to charge payment or credit any overpayment to Deposit Account No. 50-0568 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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